

networkMaryland

Getting Connected Package

For

Non-State Agencies



December 2002

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List of Version Changes

| Date | Version | Changes |
|------|---------|---------|
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1- Introduction

1.1. Purpose

The purpose of this document is to provide value added and decision making information to potential customers about networkMaryland.

1.2. Roadmap

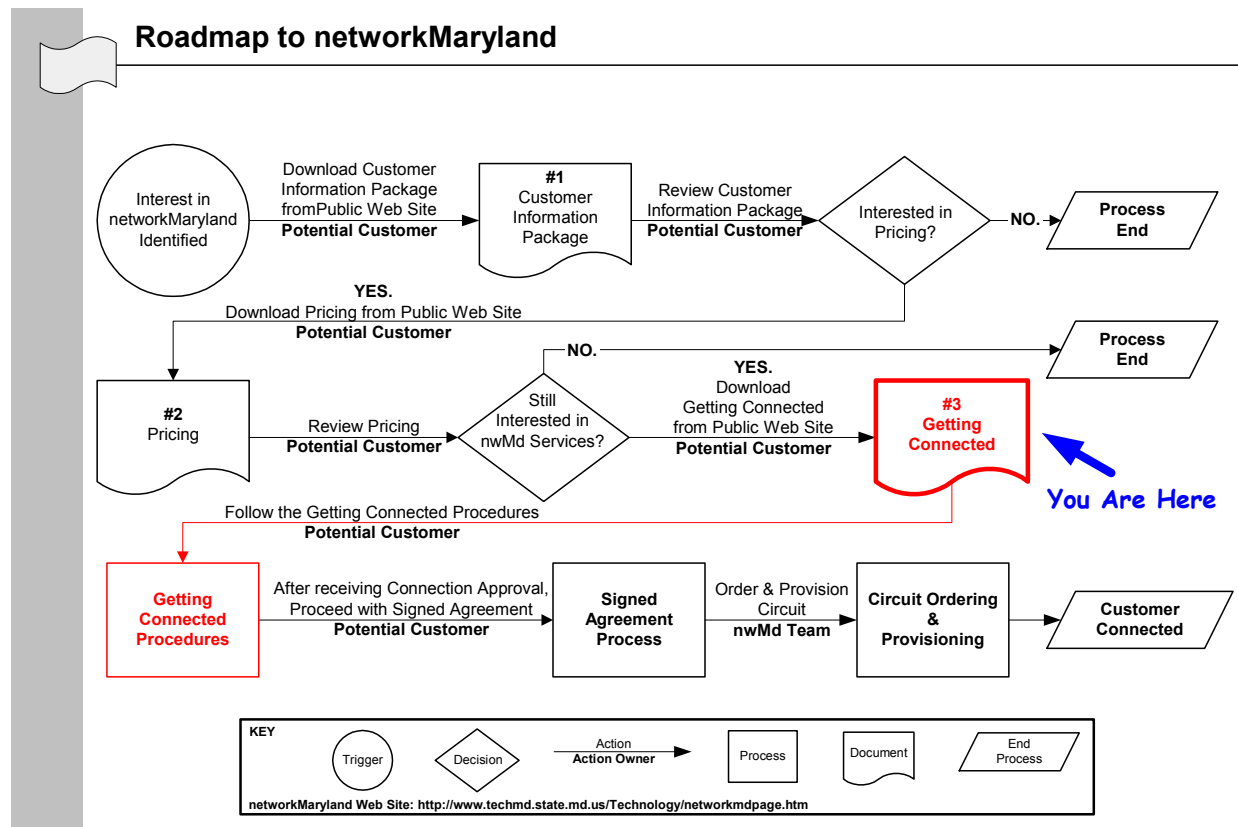


Figure 1. Roadmap – You Are Here

1.3. Document Organization

- Section 2 contains an overview of networkMaryland
- Section 3 details the Getting Connected Process
- Section 4 describes the guidelines for ordering circuits
- Section 5 contains the WAN form and instructions
- Section 6 summarizes the billing procedures information
- Section 7 summarizes the order procedures
- Section 8 illustrates the next steps for connecting to networkMaryland

1.4. Acronyms

AMAN: Annapolis Metropolitan Area Network.

ATM: Asynchronous Transfer Mode.

BMAN: Baltimore Metropolitan Area Network.

BRI: Basic Rate Interface.

CBR: Constant Bit Rate (ATM service class).

CSU: Channel Unit Service

DS3: Digital Signal Level 3 (45 Mbps) utilizes a BNC Coaxial interface.

FRASI: Frame Relay to ATM Service Interworking.

DSU: Data Service Unit

ILEC: Incumbent Local Exchange Carrier.

InterLATA: Any network circuit that crosses from one defined geographic area (LATA) into another.

ISDN: Integrated Services Digital Network.

ISP: Internet Service Provider.

LAN: Local Area Network.

LATA: Local Access Transport Area.

LEC: Local Exchange Carrier.

Local Loop: Physical network infrastructure that extends from the POP to customer premise.

MAN: Metropolitan Area Network.

NNI: Network-to-Network Interface.

NOC: Network Operating Center.

nwMd Team: Members of the DBM's networkMaryland Team.

PCR: Peak Cell Rate.

PMO: Program Management Office.

POP: Point of Presence (Network Access Point).

PSR: Provision Service Request.

PVC: Permanent Virtual Circuit.

PVP: Permanent Virtual Path.

SCR: Sustained Cell Rate.

SONET: Synchronous Optical Network.

UNI: User-Network Interface.

VLAN: Virtual Local Area Network.

VBR: Variable Bit Rate (ATM service class).

VCI: Virtual Channel Identifier.

VPI: Virtual Path Identifier.

WAN: Wide Area Network.

1.5. Team Point of Contacts

Table 1. networkMaryland Team Point of Contacts

| Name | Function | Phone #'s | Location |
|---|--------------------|------------------|-----------------|
| Margo Burnette | Project Director | 410.260.7834 | Annapolis |
| Mary Ann Slack | Project Manager | 410.260.6126 | Annapolis |
| Joe Scher | Project Controller | 410.260.7284 | Annapolis |
| Tim Kwong | Project Engineer | 410.260.7423 | Annapolis |
| Jason Ross | Project Engineer | 410.260.7279 | Annapolis |
| Email List: nwMd@dbm.state.md.us | | | |

2 - networkMaryland Overview

networkMaryland is a statewide high-speed backbone available throughout the State of Maryland to connect Public Sector customers' networks. The Public Sector is defined as State, county and municipal government agencies and departments, public libraries, public hospitals, public K-12 education, and higher education.

networkMaryland offers InterLATA transport and Internet services to the Public Sector.

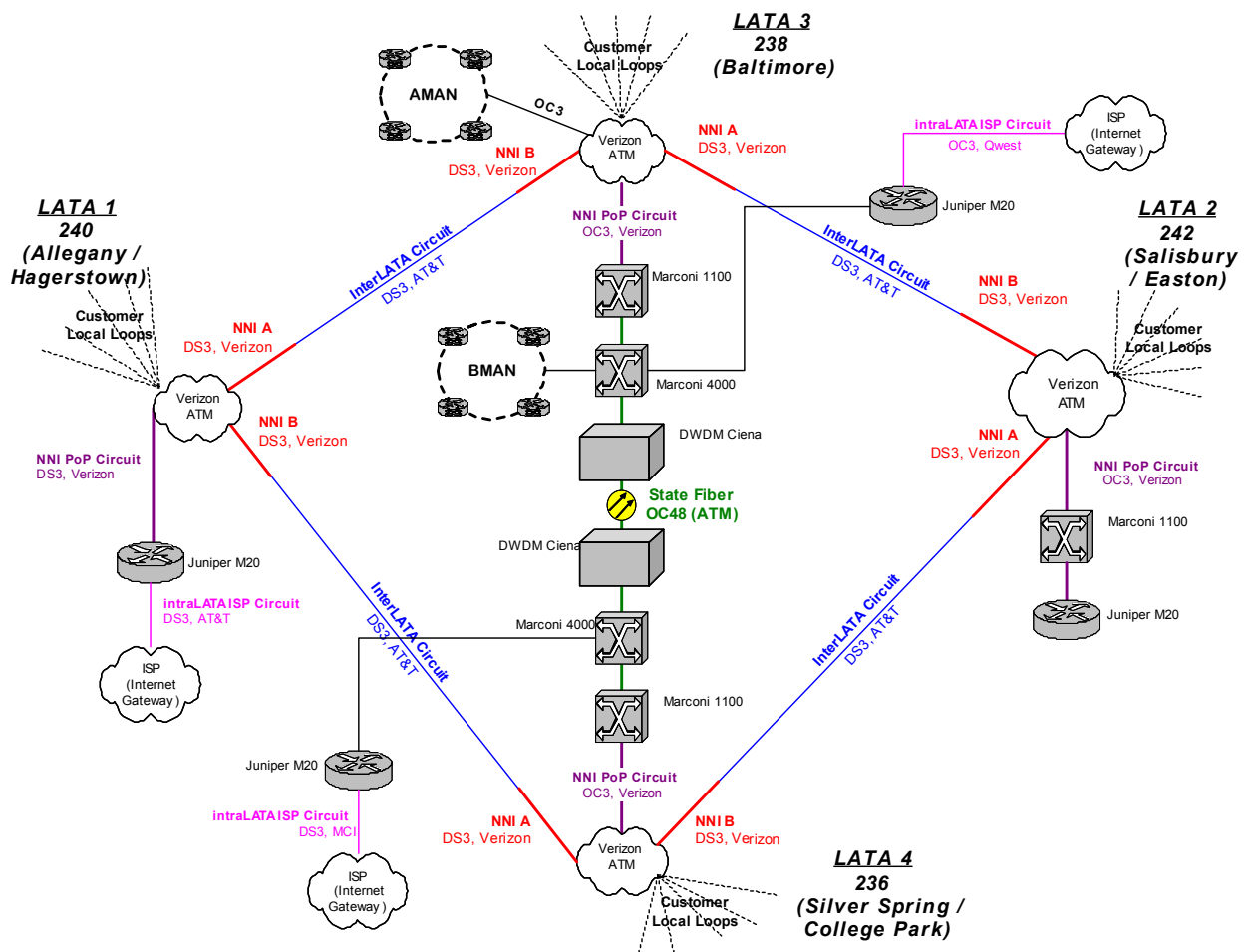


Figure 2. networkMaryland Design Overview

3- Getting Connected Process

3.1. Process TO Signed Agreement

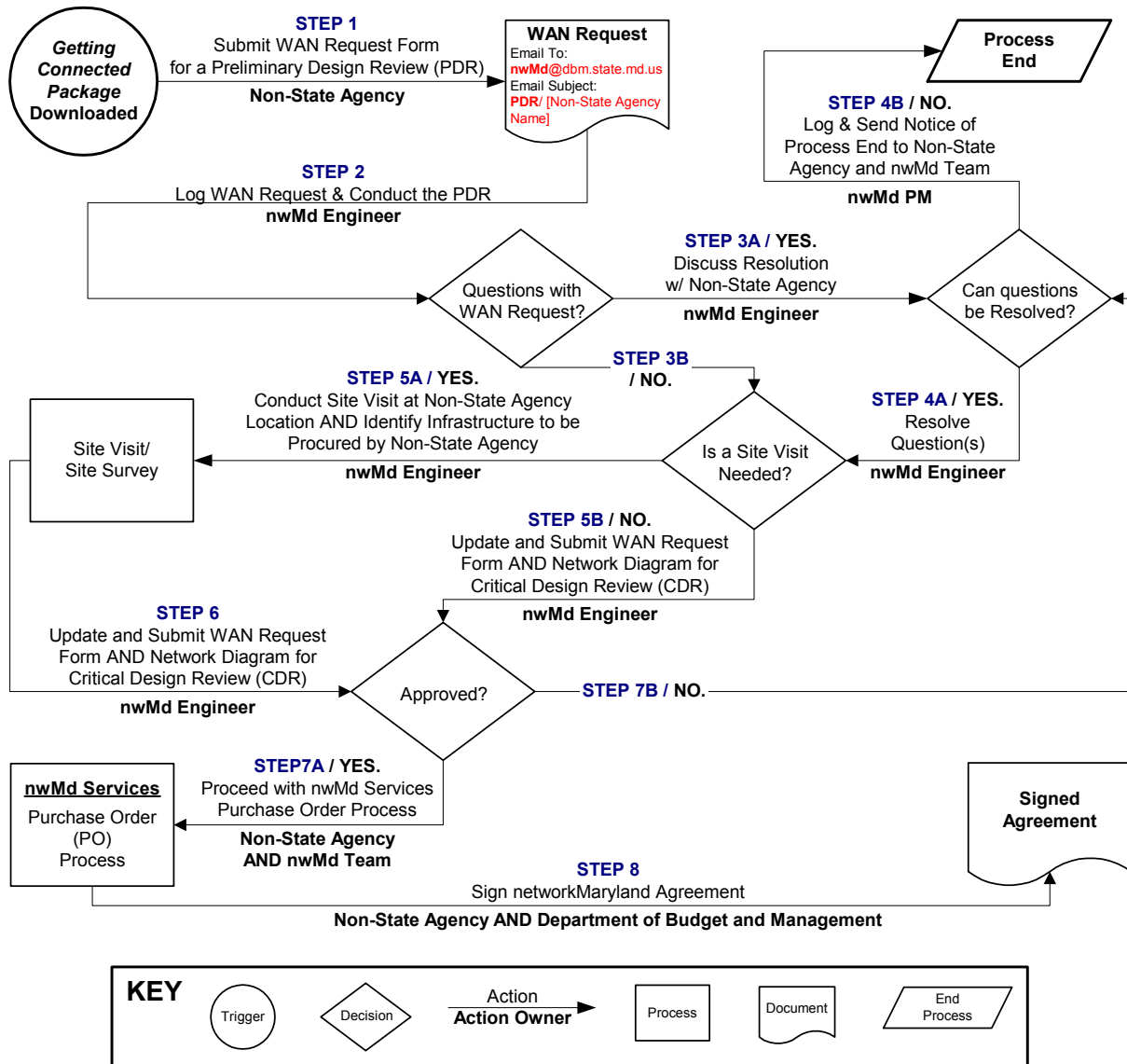


Figure 3. Non-State Agency – Process TO Signed Agreement

3.2. Process FROM Signed Agreement TO Billing

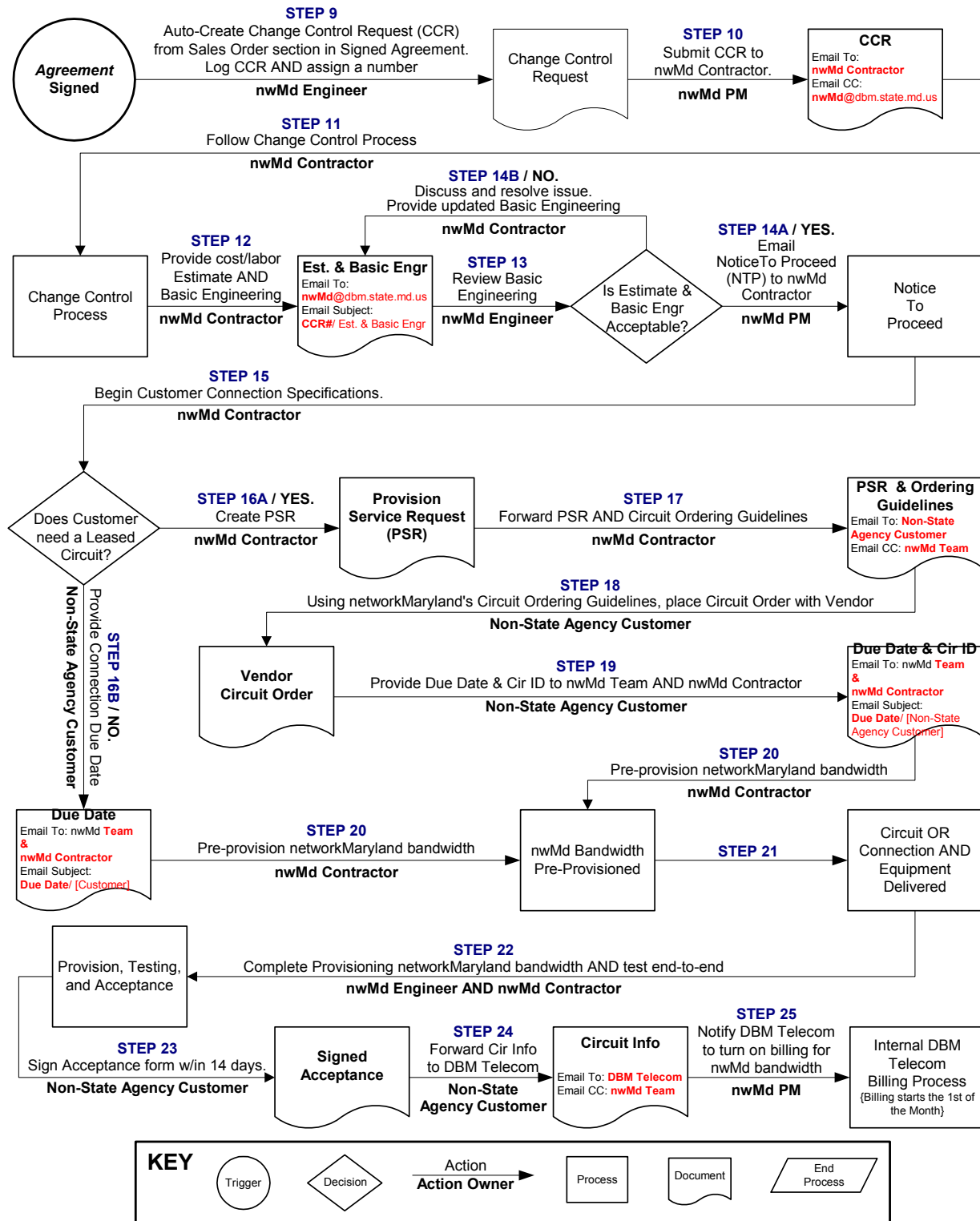


Figure 4. Non-State Agency – Process FROM Signed Agreement TO Billing

4 - Circuit Ordering Guidelines

4.1. Non-State Agencies (Public Entities)

Non-State Agency Customer's will often have local loops extended to them over a circuit vendor's infrastructure to complete the connection to networkMaryland. The ordering and costs associated with this circuit will be the responsibility of the Non-State Agency Customer. networkMaryland will provide the Non-State Agency Customer with all necessary information (circuit ID's, network addresses, ILEC contact information) needed to complete the ordering of all circuits. networkMaryland will provide a sales representative for each ILEC involved in the Non-State Agency Customer's WAN solution to ensure the ordering process and provisioning is smooth. It is the goal of networkMaryland to make the process successful by providing the resources upfront once the solution is engineered.

4.1.1 Circuit Ordering Process

- The Non-State Agency Customer and networkMaryland engineers will design the WAN solution to meet the needs of the Non-State Agency Customer.
- networkMaryland will provide the customer with appropriate network information and point of contact information to facilitate ordering the local loop circuit.
- If any problems arise from ordering your circuit through your sales representative, the dedicated networkMaryland sales representative may help to facilitate completing the order.
- The Non-State Agency Customer includes networkMaryland contact information team on the order submitted to the ILEC to ensure that nwMd engineers receive updates on the circuit status.
- networkMaryland will provide a team member as the technical contact if needed by the customer.
- The Non-State Agency Customer will receive weekly status reports to update them on the progress of network implementation.
- The installation of the local loop circuit from the ILEC and the completion of all network provisioning by networkMaryland will then signal the testing and verification stage of the process.

4.1.2. Point of Contacts for Circuit Orders

Table 2. Point of Contacts for Circuit Orders

| Contact Type | Name | Address | Phone # & Email |
|---------------|------------|---|--|
| Technical # 1 | Jason Ross | 45 Calvert Street Annapolis, Md. 21401 | 410.260.7279 (w) 413.744.0031 (c) jross@dbm.state.md.us |
| Technical # 2 | Tim Kwong | 45 Calvert Street Annapolis, Md. 21401 | 410.260.7423 (w) 413.822.3338 (c) tkwong@dbm.state.md.us |

4.1.3. Point of Contacts for Circuit Vendors

Table 3. Point of Contacts for Circuit Vendors

| Name | Company | Phone #'s | Email |
|------|---------|-----------|-------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

5 - What To Submit

The same WAN form is being used for both network Maryland Non-State Agency customer connections and the JCR §49 requirement (State Agency customers). All State Agencies and Non-State Agencies must complete all applicable information requested on the form. In the design block of the form, you should include as much information as necessary for the network engineers to make a determination about the circuit and any new communications equipment terminating either end of the circuit.

WAN Form

{See next page}

| WIDE AREA NETWORK REQUEST | | | | | | |
|--|---|---|--|--|-------|--|
| JCR SECTION 49 COMPLIANCE EFFECTIVE JULY 1, 2002 | | | | | | |
| SECTION A | Agency / Entity Control #: | | TSR # SR @CR#: | | Date: | |
| | TO: | Department of Budget & Management Office of Information Technology Information Technology Investment Management Division Email: ritm@dbm.state.md.us | | | | |
| | FROM: | Agency Name -or- Entity Name: | | Agency Code: | | |
| | | Dept. Name: | | | | |
| | | Person Authorizing: | | | | |
| | | Contact Person: | | Phone: | | |
| | | Email: | | | | |
| SECTION B | REQUEST TYPE: <i>[Place X in all boxes that apply]</i> | New? <input type="checkbox"/> | Enhance/Upgrade Existing? <input type="checkbox"/> | NwMD Request? <input type="checkbox"/> | | |
| | EST. START DATE: | | EST. COMPLETION DATE: | | | |
| | EST. INITIAL COST: <i>[State Agencies only]</i> | \$0.00 | EST. RECURRING COST: <i>[Annual Cost]</i> | \$0.00 | | |
| | | | | | | |
| SECTION C | PROJECT TITLE: <i>[Please provide a brief title.]</i> | | | | | |
| | PURPOSE: <i>[Provide the reason this work is being requested, the goal/desired result, the end-users, & locations affected]</i> | | | | | |
| | 1. Business reason/purpose: | | | | | |
| | 2. Goal or desired result: | | | | | |
| | 3. Users affected: | | | | | |
| | 4. Locations: <i>[List street address for each location]</i> | | | | | |
| | DESCRIPTION: <i>[Complete the sections below. Attach additional pages as needed. You must attach a diagram showing the network design, including LATA boundaries. If this change ties into an existing network, show the existing network with the modifications or additions.]</i> | | | | | |
| | 5. Requirements: <i>[The requirements should be in support of the goal of this project.]</i> | | | | | |
| | 6. Design: <i>[Attach diagram & system-level description of the network design.]</i> | | | | | |
| | THIS SECTION TO BE COMPLETED BY DBM | | | | | |
| Reviewed By | Person | Date | Comments | | | |
| Receipt Information | | | DBM Control # Assigned: | | | |
| ITIM Analyst | | | | | | |
| Architecture | | | | | | |
| networkMD | | | | | | |
| ENS, Telecom, Wireless | | | | | | |
| Security | | | | | | |
| State CIO Approval: | Yes <input type="checkbox"/> No <input type="checkbox"/> | State CIO Signature: | | Date: | | |

Figure 5. WAN Form

Instructions for Completing the WAN Form

| Field Name | Req./Opt. | Instructions |
|------------------------------------|------------|--|
| SECTION A: | | |
| Agency/Entity Control #: | Optional | A number you want to use to track your request internally. Enter any combination of numbers and letters. |
| TSR# or CCR#: | Optional | If a Provisioning Service Request (PSR) or CCR is being submitted with this request, please enter the number here. |
| Date: | Required | Date provisioning submitted Request (PSR) is in format. |
| To: | Pre-filled | This is the email address of the contact person for questions. |
| From: | Pre-filled | See below. |
| Agency Name or Entity Name: | Required | Full name of the agency or business submitting the request. |
| Agency Code: | Optional | The 6-digit code assigned to your agency. |
| Dept. Name: | Required | Full name of the department submitting the request. |
| Person Authorizing: | Required | Full name of person responsible for authorizing expenditures. |
| Contact Person: | Required | Full name of person we may contact for questions. |
| Phone: | Required | Telephone number of contact person for questions. |
| Email: | Required | Email of contact person for questions. |
| SECTION B: | | |
| Request Type: | Required | Check all boxes that may apply. If this is a request for services on networkMD, please be sure to check this block. |
| Est. Start Date: | Optional | The date that you would like the work to begin on this project. If there is timing factor, such as a building relocation that must occur first, please note this in the requirements section below. |
| Est. Completion Date: | Required | The date that you would like the work to be completed. If there is a time constraint, such as operations must be up and running by a specific date, please note this in the requirements. |
| Est. Initial Cost: | Required | For State agencies only. Please estimate any one-time costs. |
| Est. Recurring Cost: | Required | Estimate the annual cost of the circuit. |
| SECTION C: | | |
| Project Title: | Required | A unique name or brief title for this project. |
| Purpose: | Pre-filled | See below. |
| 1. Business reason/purpose: | Required | The reason why you are doing this project. All of the text fields will expand as you write. |
| 2. Goal or desired result: | Required | What is the goal and/or what do you hope to accomplish when this work is complete? Example: faster response time, more users, disaster recovery ability, etc. |
| 3. Users affected: | Required | The number of potential or actual users and the type of user. |
| 4. Locations | Required | Please list the locations to be connected, their street addresses, cities, and building names, if applicable. |
| Description: | Pre-filled | See below. |
| 5. Requirements: | Required | Describe the requirements of the network. Include bandwidth requirements, type of expected traffic, timing considerations, backup, security, redundancy, etc. |
| 6. Design: | Required | Describe the circuit types and sizes, hardware planned, connectivity. Attach a diagram depicting the proposed network design for all circuits, including the locations and LATA boundaries, if applicable. |

Figure 6. WAN Form Instructions

Network Diagram

Attach a network diagram illustrating the proposed new circuit or changes to existing network. A sample diagram is attached. Include the following information:

- Locations – origination and termination (*Indicate existing where affected and new*)
- Type of circuit or service and bandwidth – (*e.g. Frame, ATM, SONET/ DS1, DS3, OC3*)
- New network devices - (*e.g. DSU/CSU, Router*)
- Show any cross LATA boundaries on the network diagram

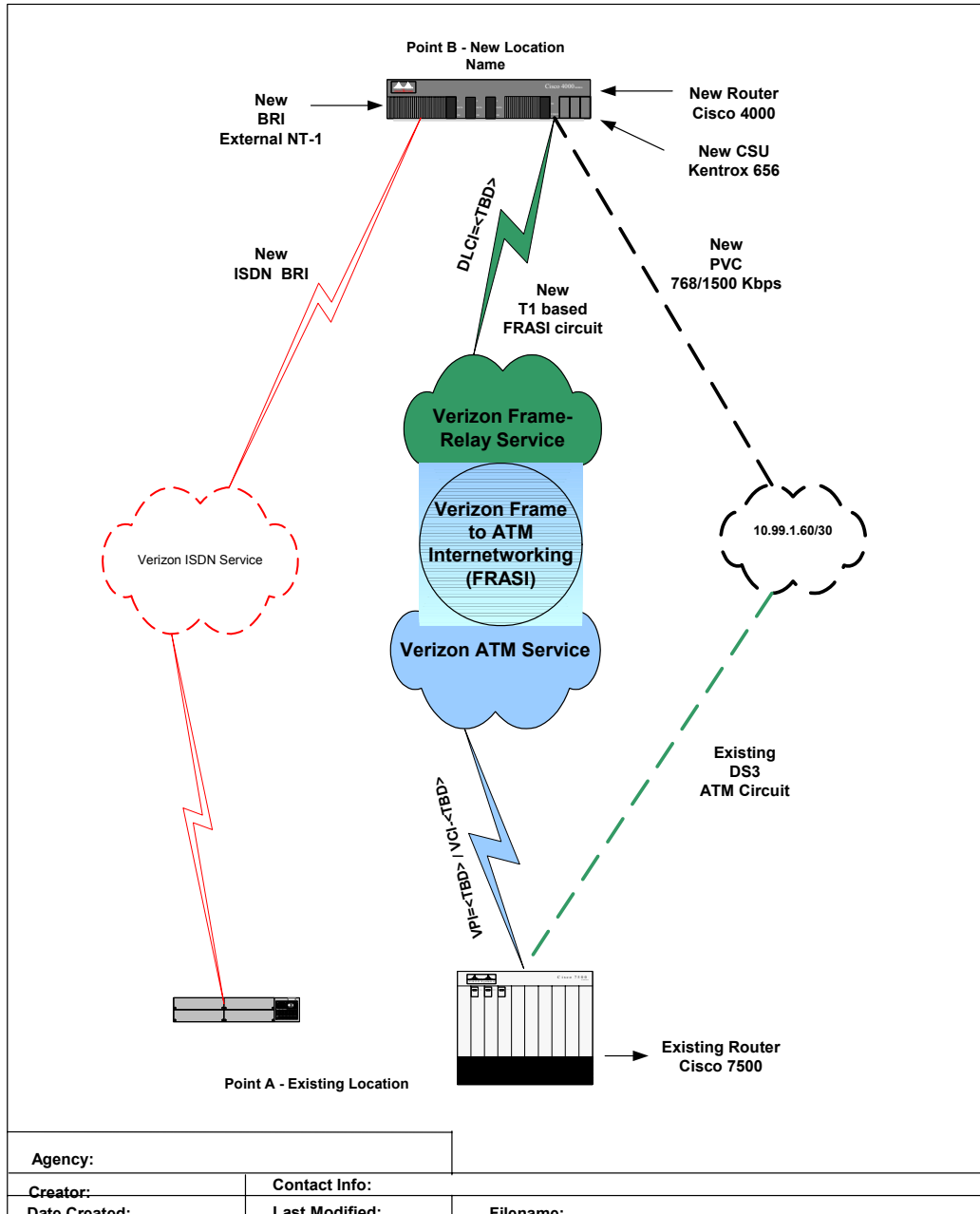


Figure 7. Network Diagram Sample

6 - Billing Procedures

- Original Purchase Orders received by networkMaryland will be reviewed to insure all required information is present and in agreement with the Customer Agreement rate structure. The original Purchase Order will be maintained with the Customer Agreement as a permanent record for the length of the contract.
- A copy of the Purchase Order will be sent to the Accounting Supervisor of the Telecommunications Division. Included on the Purchase Order will be all information necessary to establish a new customer account and the monthly charge for billing purposes. Also included is the contact person for use as needed.
- All networkMaryland billing may be performed once monthly. It will be the responsibility of the Telecommunications Division to maintain a current list of all customer accounts and their monthly service charge. This file will also be required periodically by networkMaryland, especially for budget planning purposes.
- Each new or additional service shall be chargeable to the customer the first day of the month following the month in which the purchase order was signed.
- Each cancellation will be effective the last day of the month for which a cancellation order is received. The date of receipt shall be the basis for this determination.
- There will be no partial month calculation required for any networkMaryland customer billing.
- Any customer calls, complaints or questions beyond those associated with the billing or rate process may be directed to network Maryland staff members, depending upon the subject matter, technical or administrative.
- **NOTE:** Pricing for networkMaryland is still under review. Until it has been approved and put in place, not billing activities will occur. There will be no retroactive billing.

7 - Non-State Agency Order Procedures

A completed and signed Purchase Order made out to the following address should accompany the signed Customer Agreement package. All cost associated with this service is contained in the Customer Agreement and should be included in the Purchase Order.

NetworkMaryland
Department of Budget & Management
45 Calvert Street
Annapolis, MD 21401

The Purchase Order must contain the Federal Identification Number of the customer, as well as the terms of the order, correct billing address, and name of the person to contact should any questions arise. The title of the official signing the Purchase Order is also required. Additional information such as the e-mail address of the contact person is welcome.

This information will be used to create and mail the monthly invoice. It will be the customer's responsibility to maintain current data for this address and contact person. Late payments will be subject to a late fee.

8 - Next Steps

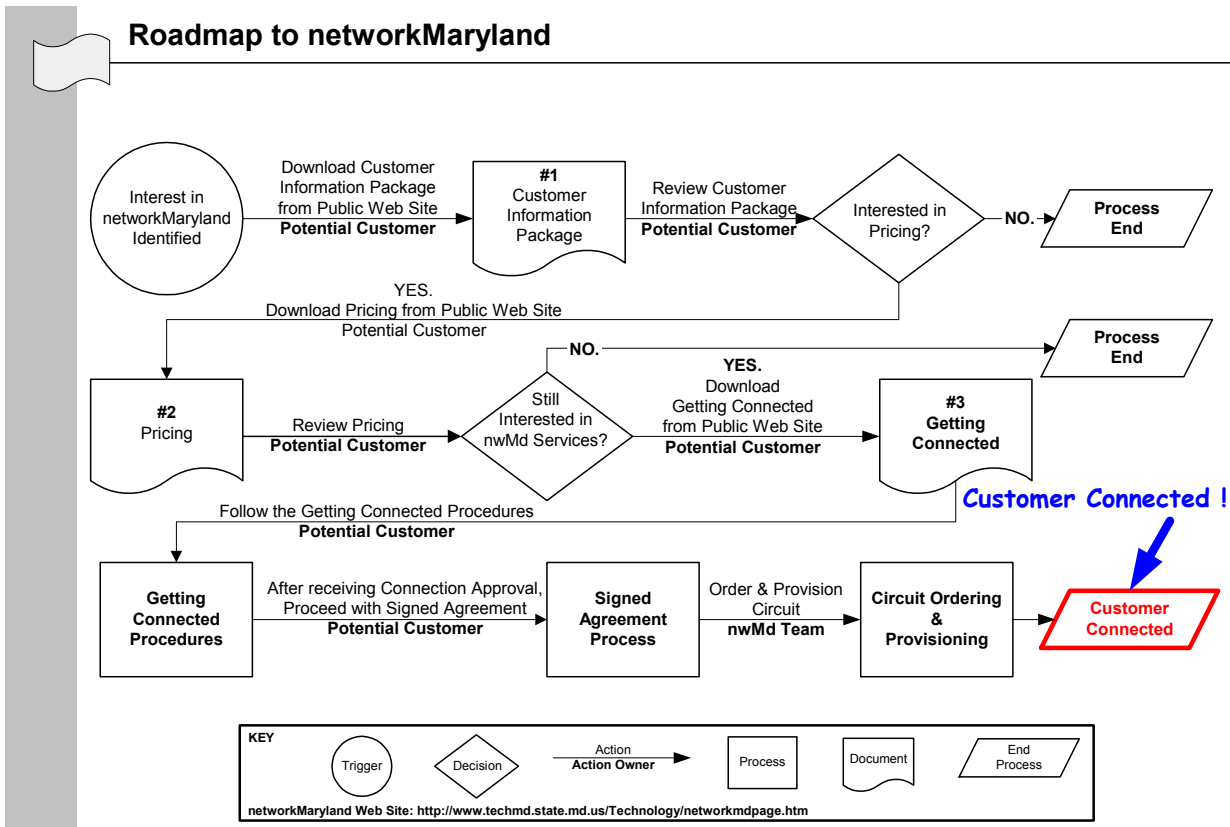


Figure 8. Roadmap – Sign the Agreement